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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of : Customer Number: 46320

Gabriel MONTERO : Confirmation Number: 1061

.

Application No.: 10/026,385 : Group Art Unit: 2142

Group The Offic. 21

Filed: December 21, 2001 : Examiner: M. Meucci

For: DYNAMIC PARTITIONING OF MESSAGE SYSTEM TOPICS

### **APPEAL BRIEF**

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed March 28, 2006, in response to the Examiner reopening prosecution in the Office Action dated April 12, 2007, and in response to the Examiner reopening prosecution in the Office Action dated January 25, 2008, wherein Appellant appeals from the Examiner's rejection of claims 1-9.

### **I. REAL PARTY IN INTEREST**

This application is assigned to IBM Corporation by assignment recorded on December 21, 2001, at Reel 012408, Frame 0202.

### II. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any related appeals and interferences.

### **III. STATUS OF CLAIMS**

Claims 1-9 are pending in this Application and have been five-times rejected. It is from the multiple rejections of claims 1-9 that this Appeal is taken.

### **IV. STATUS OF AMENDMENTS**

The claims have not been amended subsequent to the imposition of the Fifth Office Action dated January 25, 2008 (hereinafter the Fifth Office Action).

### V. SUMMARY OF CLAIMED SUBJECT MATTER

Referring to Figs. 1 and 2 and to independent claim 1, a message system includes at least one message server 115 and a dynamic topic partitioning system 120 (page 7, lines 15-20 of Appellant's disclosure). A plurality of topics 210 are stored 110 in the at least one message server 115 (page 7, line 22). A plurality of subtopics 220 are associated with at least one of the topics 210 in the at least one message server 115 (page 8, lines 2-3), and the dynamic topic partitioning system 120 is configured to partition the at least one of the topics 210 into the subtopics 210 (page 8, lines 1-4). Messages are posted to and retrieved from individual ones of the plurality of topics 210 (pages 8, lines 3-4).

Referring to Figs. 1 and 2 and to independent claim 6, a dynamic topic partitioning system 120 is disclosed. The dynamic topic partition system 120 includes a message interface 120, a subtopic store 110, and a request processor. Message publishers 102 can post messages to selected topics 210 through the message interface 120 (page 7, lines 14-16). Message subscribers 104 can request messages which have been published to selected topics 210 from the message interface 120 (page 7, lines 16-18). The subtopic store 110 is configured to distribute

messages of the selected topics 210 within associated subtopics 220, and the request processor converts requests to post and retrieve messages to and from individual ones of the selected topics 210 into message system requests to respectively post and retrieve messages to and from the associated subtopics 220 in the subtopic store 110 (page 9, lines 1-7). The request processor processes each of the converted message system requests in individual threads of execution (page 9, lines 8-11).

Referring to Figure 3B and to independent claim 8, a message system servicing method is disclosed. In step 312, message requests for a selected topic are from subscribers are intercepted in the message system (page 9, line 23 through page 10, line 1). In step 314, the message requests are associated with a plurality of subtopics created for the selected topic (page 10, lines 1-2). In step 318, the message requests are serviced with messages in the subtopics from within separate threads of execution for each subtopic-subscriber pair (page 10, lines 2-5; page 9, lines 9-11).

Referring to Figure 3B and to independent claim 9, a machine readable storage having stored thereon a computer program for performing message system servicing is disclosed. The computer program comprises a routine set of instructions for causing the machine to perform the following steps. In step 312, message requests for a selected topic are from subscribers are intercepted in the message system (page 9, line 23 through page 10, line 1). In step 314, the message requests are associated with a plurality of subtopics created for the selected topic (page 10, lines 1-2). In step 318, the message requests are serviced with messages in the subtopics from within separate threads of execution for each subtopic-subscriber pair (page 10, lines 2-5; page 9, lines 9-11).

### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1, 3-6, and 8-9 were rejected under 35 U.S.C. § 102 for anticipation based upon Knight et al., U.S. Patent No. 6,493,703 (hereinafter Knight); and

2. Claims 2 and 7 were rejected under 35 U.S.C. § 103 for obviousness based upon Knight in view of Razdan et al., U.S. Patent Publication No. 2002/0141584 (hereinafter Razdan).

#### VII. ARGUMENT

# THE REJECTION OF CLAIMS 1, 3-6, AND 8-9 UNDER 35 U.S.C. § 102 FOR ANTICIPATION BASED UPON KNIGHT

For convenience of the Honorable Board in addressing the rejections, claims 3 and 4 stand or fall together with independent claim 1; claim 5 stands or falls alone; and claims 8 and 9 stands or falls together with independent claim 6.

The factual determination of anticipation under 35 U.S.C. § 102 requires the <u>identical</u> disclosure, either explicitly or inherently, of <u>each</u> element of a claimed invention in a single reference.<sup>1</sup> As part of this analysis, the Examiner must (a) identify the elements of the claims, (b) determine the meaning of the elements in light of the specification and prosecution history, and (c) identify corresponding elements disclosed in the allegedly anticipating reference.<sup>2</sup> This burden has not been met. Moreover, the Examiner has failed to <u>clearly</u> designate the teachings in Wang being relied upon the statement of the rejection. This burden has not been met.

#### Claim 1

Independent claim 1 recite, in part, "messages are posted to and retrieved from individual ones of said plurality of topics." To teach this limitation, the Examiner cited column 2, lines 7-12 and 22-24 of Knight. However, the Examiner's cited passage is to what Knight considers to be the prior art; and therefore, the Examiner is not relying upon the teachings of Knight. Since a rejection of anticipation requires that the teachings be found in a single reference, the Examiner

<sup>&</sup>lt;sup>1</sup> <u>In re Rijckaert</u>, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); <u>Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick Co.</u>, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

<sup>&</sup>lt;sup>2</sup> Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick Co., supra.

has failed to establish that Knight identically discloses the claimed invention as recited in claim 1.

Referring to column 12, lines 2-6 of Knight, a message is not posted to a message topic. Instead, Knight appears to teach that the message is posted to a sub-topic (i.e., "subject matter area/class/subclass index"). On the contrary, although the claimed invention recites that topics are portioned into subtopics, message are posted to and retrieved from individual ones of the plurality of topics.

### Claim 5

Dependent claim 5 recites "a plurality of threads of execution, each said thread hosting a process for communicating a message between one of said subtopics in said at least one message server and a message subscriber," and to teach this limitation, the Examiner relied upon column 2, lines 2-4 and 13-15. As noted above, these cited passages are not the teachings of Knight.

These passages also do not identically disclose the claimed invention, as recited in claim 5. Specifically, entirely absent from these passages is a teaching as to the claimed "plurality of threads of execution." As discussed in page 3, lines 8-14, threads of execution are associated with a virtual machine. Not only has the Examiner failed to provide a claim construction for this phrase, the Examiner has failed to establish that Knight identically these limitations.

### Claim 6

Claim 6 recites that messages are posted to (and requested from) selected topics and that a request processor coverts requests to post and retrieve messages to and from individual ones of the selected topics into requests to and from associated subtopics. Regarding the claimed request processor, the Examiner cited column 2, lines 7-18; column 4, lines 21-24; column 8, lines 26-31; and column 10, lines 1-5. However, none of the Examiner's cited passages, either alone or in combination, teach these limitations.

Column 2, lines 7-18 is silent as to subtopics. Column 4, lines 21-24 is also silent as to subtopics. Column 8, lines 26-31 and column 10, lines 1-5 refer to a robot that extracts information from content sources to build a predefined collection of message postings which presumably could be sorted by subtopics. However, these passages are silent as to converting request to post and retrieve messages to and from individual ones of the selected topics into requests to and from associated subtopics. Therefore, the Examiner has failed to establish that Knight identically discloses the claimed invention as recited in claim 6.

# THE REJECTION OF CLAIMS 2 AND 7 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON KNIGHT IN VIEW OF RAZDAN

For convenience of the Honorable Board in addressing the rejections, claim 2 stands or falls together with independent claim 1, and claim 7 stands or falls together with independent claim 6.

Claims 2 and 7 respectively depend from independent claims 1 and 6, and Appellant incorporates herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 6 under 35 U.S.C. § 102 for anticipation based upon Knight. The secondary reference to Razdan does not cure the argued deficiencies of Knight. Accordingly, even if one having ordinary skill in the art were realistically impelled to modify Knight in view of Razdan, the proposed combination of references would not yield the claimed invention. Appellant, therefore, respectfully submits that the imposed rejection of claims 2 and 7 under 35 U.S.C. § 103 for obviousness based upon Knight in view of Razdan is not viable.

Conclusion

Based upon the foregoing, Appellant respectfully submits that the Examiner's rejections

under 35 U.S.C. §§ 102, 103 based upon the applied prior art is not viable. Appellant, therefore,

respectfully solicits the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. §§

102, 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in

connection with the filing of this paper, including extension of time fees, to Deposit Account 09-

0461, and please credit any excess fees to such deposit account.

Date: April 25, 2008

Respectfully submitted,

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**CUSTOMER NUMBER 46320** 

### VIII. CLAIMS APPENDIX

1. A messaging system comprising:

at least one message server;

a plurality of topics stored in said at least one message server;

a plurality of subtopics associated with at least one of said topics in said at least one message server; and,

a dynamic topic partitioning system configured to partition said at least one of said topics into said subtopics, wherein

messages are posted to and retrieved from individual ones of said plurality of topics.

- 2. The message system of claim 1, wherein said message server is Java message service (JMS) compliant.
- 3. The message system of claim 1, wherein said at least one message server resides in at least one process address space.
- 4. The message system of claim 3, wherein said at least one process address space is a Java virtual machine.
- 5. The message system of claim 1, further comprising a plurality of threads of execution, each said thread hosting a process for communicating a message between one of said subtopics in said at least one message server and a message subscriber.

6. A dynamic topic partitioning system comprising:

a message interface through which message publishers can post messages to selected

topics, and from which message subscribers can request messages which have been published to

selected topics;

a subtopic store configured to distribute messages of said selected topics within

associated subtopics; and,

a request processor in which requests to post and retrieve messages to and from

individual ones of said selected topics can be converted into message system requests to

respectively post and retrieve messages to and from said associated subtopics in said subtopic

store, said request processor processing each of said converted message system requests in

individual threads of execution.

7. The dynamic topic partitioning system of claim 6, wherein said message interface

comports with the Java message service (JMS) specification.

8. A message system servicing method comprising the steps of:

intercepting message requests for a selected topic from subscribers in the message

system;

associating said message requests with a plurality of subtopics created for said selected

topic; and,

servicing said message requests with messages in said subtopics from within separate

threads of execution for each subtopic-subscriber pair.

9. A machine readable storage having stored thereon a computer program for performing message system servicing, said computer program comprising a routine set of instructions for causing the machine to perform the steps of:

intercepting message requests for a selected topic from subscribers in the message system;

associating said message requests with a plurality of subtopics created for said selected topic; and,

servicing said message requests with messages in said subtopics from within separate threads of execution for each subtopic-subscriber pair.

### IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellant in this Appeal, and thus no evidence is attached hereto.

### X. RELATED PROCEEDINGS APPENDIX

Since Appellant is unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.